

Claims

1. A gas generator for an air bag used in an inflating-type safety system of a vehicle, provided with, in a gas generator housing, a pressurized medium accommodating chamber charged with a pressurized medium and plural gas generating chambers partitioned from the pressurized medium accommodating chamber, wherein

the pressurized medium accommodating chamber is provided with openings corresponding to the respective gas generating chambers and respective openings are closed by rupturable plates,

the gas generator is provided with a moving body for rupturing a rupturable plate (a first rupturable plate) for closing an opening (a first opening) corresponding to at least one gas generating chamber (a first gas generating chamber),

the first gas generating chamber has a single gas ejecting port for ejecting a gas inside the first gas generating chamber,

the moving body is provided with a projecting portion facing the first rupturable plate and is disposed to be away from the first rupturable plate, and

another opening (a second opening) and another rupturable plate (a second rupturable plate) closing the another opening is provided inside the pressurized medium accommodating chamber at a position deviated from a hitting portion of the propelled moving body.

2. A gas generator for an air bag according to claim 1,

wherein the hitting portion for the moving body exists inside the pressurized medium accommodating chamber in extension of the line connecting the moving body and the first rupturable plate.

3. A gas generator for an air bag according to claim 1 or 2, wherein the projecting portion is formed in a spherical shape or a tapered shape, and the moving body is disposed such that the projecting portion faces the first rupturable plate.

4. A gas generator for an air bag according to any one of claims 1 to 3, wherein the pressurized medium accommodating chamber is formed in a column shape, and a first opening is formed at one end portion thereof and a second opening is formed at the other end portion thereof.

5. A gas generator for an air bag according to any one of claims 1 to 4, wherein the moving body leaps due to a pressure generated inside the first gas generating chamber to rupture the first rupturable plate and irrupts into the pressurized medium accommodating chamber.

6. A gas generator for an air bag according to any one of claims 1 to 5, wherein an igniter actuated upon receiving an actuation signal, or the igniter and a gas generating agent burnt by actuation of the igniter are disposed in the plural gas generating chambers.

7. A gas generator for an air bag according to any one of claims 1 to 6, wherein a gas outlet chamber is provided between the first gas generating chamber and the pressurized medium accommodating chamber, and plural gas discharging ports are

formed in the circumferential direction of the gas outlet chamber.

8. A gas generator for an air bag according to claim 7, wherein a retainer is provided to be fixed in the gas outlet chamber, and the retainer holds the moving body.

9. A gas generator for an air bag according to any one of claims 1 to 8, wherein the center of the gas ejecting port, the center of the moving body and the center of the first rupturable plate are arranged in the almost same line.

10. A gas generator for an air bag according to any one of claims 1 to 9, wherein the moving body is disposed to face the single gas ejecting port or be fitted therein.

11. A gas generator for an air bag according to any one of claims 1 to 10, wherein the rupturable plate (the second rupturable plate) which closes the opening (the second opening) corresponding to the another gas generating chamber (the second gas generating chamber) of the plural gas generating chambers is ruptured by heat or pressure of a gas ejected from the second gas generating chamber.

12. An air bag system comprising an actuation-signal outputting means including an impact sensor and a control unit, and a module case accommodating a gas generator for an air bag according to any one of claims 1 to 11 and an air bag in a case.